

and palatal surfaces of the maxillary jawbone and the buccal, labial and lingual surfaces of the mandibular jawbone, thereby forming an anchor in a non-occlusal surface of the mouth for use in creating a stabilizing or moving force.

4178. (Amended) A method of forming an orthodontic or orthopedic load-bearing anchorage system including an onplant and an implant in the mouth for use in creating a stabilizing or moving force, comprising the steps of:

placing an onplant on a bone surface in the mouth selected from the group consisting of the buccal, labial, lingual and palatal surfaces of the maxillary jawbone and the buccal, labial and lingual surfaces of the mandibular jawbone, said onplant having a bone-facing surface, an opposite face, and a hole extending through said onplant at an angle substantially perpendicular to said bone-facing surface; and

positioning a portion of an implant through said hole in said onplant and in an opening in said bone surface thereby affixing said onplant to said bone surface, said implant having an elongated body including an inner end and an outer end.

Remarks

As requested by Examiner Ghatt in his July 10, 1997 voice mail message to Applicants' representative, Applicants are submitting this Supplemental Reply in which Applicants are formally presenting several amendments and remarks which Applicants' representative discussed with Examiners Ghatt and Burr in several brief telephone conversations specifically identified and discussed in this Remarks section. This Supplemental Reply follows up on Applicants' timely filed February 28, 1997 Reply which was presented in response to the Office Action dated August 28, 1996. In the February 28, 1997 Reply, Applicants presented new claims 38-83 and cancelled claims

1-37. In this Supplemental Reply, Applicants have amended claims 38, 49, 50, 54, 57, 63, 77 and 78, as noted in the Claims section above.

On June 3 and June 23, 1997, Applicants' representative discussed new claims 38-83 with the Examiners, as well as the references of record including the references provided in the February 28, 1997 Supplemental Information Disclosure Statement. During these conversations, it was agreed that Applicants would submit several potential claim amendments for discussion purposes. In addition, Examiner Burr requested that Applicants highlight the meaning of the term "orthodontic appliance" by having Applicants' representative provide a statement in the remarks of the Supplemental Reply as to the meaning of the term as it is used and defined in the Application as filed. Pursuant to this request, Applicants hereby note that the term "orthodontic appliance" refers to a bracket, hook, ball joint, buccal tube, Herbst Appliance, arch-expanding jack screw, and the like. The term also refers to any other orthodontic or orthopedic device which may benefit from the use of an implant as a load-bearing anchor in the mouth, in creating a stabilizing or moving force. However, a suture is not considered an orthodontic appliance. Support for this statement regarding the term "orthodontic appliance" may be found in the Application as originally filed on pages 6, 20 and 21.

On June 26, 1997, Applicants' representative and the Examiners briefly discussed Applicants' June 25, 1997 facsimile to the Examiners in which Applicants presented potential claim amendments and a sample statement regarding the use of the term "orthodontic appliance." It was agreed that Applicants would submit additional potential amendments for discussion purposes, and Applicants presented such sample amendments in a June 30, 1997 facsimile to the Examiners. On July 8, 1997, Applicants' representative and the Examiners discussed these additional potential claim amendments.

During the conversation, it was agreed that Applicants would submit a few additional potential claim amendments for discussion purposes. In addition, Examiner Burr requested that Applicants discuss the patentability of the claims over the *Impaction Post* instruction booklet by having Applicants' representative highlight the patentability of the claims in the Remarks of the Supplemental Reply. (The *Impaction Post* instruction booklet was filed in the February 28, 1997 Supplemental Information Disclosure Statement.) Applicants provided these additional potential amendments and commentary on the *Impaction Post* booklet in a July 9, 1997 facsimile to the Examiners.

Then on July 10, 1997, Applicants' representative received the above-mentioned voice mail message from Examiner Ghatt, acknowledging receipt of Applicants' July 9, 1997 facsimile. Consistent with Examiner Burr's request, Applicants are providing the following remarks with respect to the patentability of claims 38-83 over the *Impaction Post* booklet.

As shown in pending claims 38-83, Applicants claim an implant for use as an orthodontic or orthopedic load-bearing anchor in the mouth in creating a stabilizing or moving force. That is, the implant itself receives tooth-moving or tooth-stabilizing (orthodontic) or bone-moving or bone-stabilizing (orthopedic) loads.

However, Applicants' claimed invention is neither shown nor suggested in the *Impaction Post* booklet. Upon a review of the *Impaction Post* booklet, one of ordinary skill in the art would immediately recognize that the impaction post shown and described is unsuitable for use as an orthodontic or orthopedic load-bearing anchor.

Rather than being an anchor capable of bearing orthodontic or orthopedic loads, the post is a periosteal suture used for tying off surgical thread in maintaining a flap or graft in place. See Fig. 1 on page 1, Figs. 9 and 10 on page 7 and text on page 8 of the booklet. The surgical thread is passed

through interdental spaces and/or through the surrounding tissues, and, as noted on page 8 of the booklet, the tension on the thread (and therefore on the impaction post) should not be over-excessive, so as to avoid tissue injury due to post-surgical edema.

Because of this tension limitation on the impaction post/periosteal suture, one of ordinary skill in the orthodontic art would find no suggestion in the *Impaction Post* booklet of an implant for use as an orthodontic or orthopedic load-bearing anchor in the mouth, as claimed by Applicants. Accordingly, the invention embodied in claims 38-83 patentably distinguishes over the post/periosteal suture shown in the *Impaction Post* booklet.

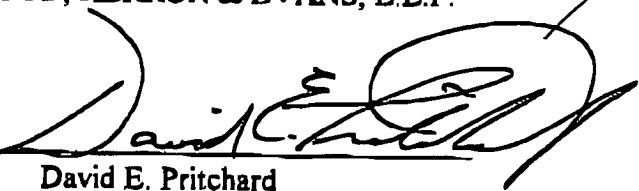
Conclusion

Given the amendments and remarks presented above, Applicants respectfully believe that pending claims 38-83 are in condition for allowance, and respectfully request an early notification to this effect. If any outstanding issues remain, Applicants cordially invite and encourage the Examiner to call Applicants' representative at the number listed below.

Respectfully submitted,

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